## COMMENTS

The enclosed is responsive to the Office Action mailed on September 2, 2004. At the time the Examiner mailed the Office Action claims 1-22 were pending. By way of the present response the Applicants have: 1) amended claims 1, 2, 8, 10, and 14; 2) added no new claims and cancelled no claims. As such, claims 1-22 are now pending. The Applicants respectfully request reconsideration of the present application and the allowance of all claims now presented.

Claims 1-4, 8-11, 14-17 and 21-23 stand rejected under 35 U.S.C. §102(b) as being anticipated by Austin, et al., U.S. Patent 3,163,850 (hereinafter, "Austin"). Claims 5, 7 12, 13, 18, and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Austin, et al., U.S. Patent No. 3,163,850, (hereinafter "Austin"); and Claims 16-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Austin, in view of McDonnell, et al., U.S. Patent No. 2,968,027, (hereinafter "McDonnell").

In the office action, the Examiner stated that the addition of "general purpose" to the claims was equivalent to "claiming that the invention does not require dedicated hardware. However, this form of negatively claiming applicant's invention does not accomplish this intention because any hardware designed to assist in the gather/scatter operation that also happens to be used for any other operation ceases to be 'dedicated' to just the gather/scatter operation. Applicant is advised to amend the claims such that they reflect what the invention _does_ and not what the invention _does not_ do."

In response, Claim 1 has been amended to more clearly recite two instructions known to be usable on a general purpose processor: an EXTRACT instruction and a DEPOSIT instruction. Specifically, in Claim 1, a plurality of EXTRACT instructions are executed to transfer a plurality address indices from a first storage location (e.g., a register) where the indices are stored substantially contiguously, to an equal plurality of separate storage locations, wherein each index is assigned its own separate storage location. In addition, in Claim 1, an equal plurality of DEPOSIT instructions are executed, each DEPOSIT instruction depositing each of the data elements contiguously with other data elements in a general purpose register.

Applicant has reviewed the references cited by the Examiner and is unable to find the use of EXTRACT and DEPOSIT instructions to perform a gather operation on a plurality of data elements. In Austin the record definition words ("RDWs") "define the specific areas of the memory which data is to be read into [in] the case of [a] scatter operation, or read from in the case of a gather operation." Austin, column 5, lines 35-37. These RDWs are used by the record scatter variable ("RSV") instruction word to perform its designated operations. However, there is no suggestion that the RDWs themselves include indices which are stored contiguously in a first storage location and transferred to a plurality of separate storage locations via an EXTRACT instruction.

Claim 8 has been amended to more clearly recite that indices for a plurality of data elements stored in a contiguous memory location are extracted using a first set of EXTRACT instructions, and that the data elements

themselves are extracted from the contiguous memory location using a second set of EXTRACT instructions. Applicants respectfully submit that none of the references cited by the examiner disclose or suggest the use of one set of EXTRACT instructions for extracting indices and another set of EXTRACT instructions for extracting data elements.

Claim 14 has been amended in a similar manner as Claim 1. Accordingly, Applicants respectfully submit that Claim 14 is allowable for all of the reasons set forth above with respect to Claim 1.

The remaining pending claims are dependent claims which include the limitations of the independent claims as well as additional limitations. As such, Applicants submit that all pending claims 1-22 are allowable over the prior art of record.
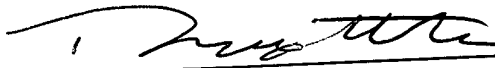
## CONCLUSION

For the reasons provided above, Applicant respectfully submits that the current set of claims are allowable. If the Examiner believes an additional telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Thomas C. Webster at (408) 720-8300.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: 1 3 05

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